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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/433,418	11/04/1999	JOEL B. EPSTEIN	244/023	2559
7590 08/10/2004			EXAMINER	
Patent Administrator			HUI, SAN MING R	
Katten Muchin Zavis Rosenman			ART UNIT	
525 West Monroe			PAPER NUMBER	
Suite 1600			1617	
Chicago, IL 60661-3693			DATE MAILED: 08/10/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/433,418

Applicant(s)

EPSTEIN, JOEL B.

Examiner

San-ming Hui

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1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,9-11,19-21,23,24,27-29 and 39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,9-11,19-21,23,24,27-29 and 39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 21, 2004 has been entered.

Claims 1-3, 5-6, 9-11, 19-21, 23-24, 27-29 and 39 are pending.

The outstanding objection is withdrawn in view of the amendments filed May 21, 2004.

### ***New ground of rejection***

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-6, 9-11, 19-21, 23-24, 27-29 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hewitt et al. (USPN 5,540,931), Lozada, and Sharpe et al. (USPN 5,637,616) in view of Batt et al. (USPN 5,578,609).

Hewitt et al. (USPN 5,540,931) teaches topical compositions for site-specific immune suppression comprising one or more immunosuppressants, e.g., azathioprine, cyclophosphamide, didemnin B, deoxyspergualin. Methotrexate, thalidomide, or combinations thereof, see claims 1-7. Hewitt et al. also teaches the employment of hydrocortisone in its formulation, see claims 7-9. Hewitt finally teaches that some conditions may require topical immunosuppression alone, see col. 9, lines 19-21 for example.

Lozada teaches a method of treating patients with chronic inflammatory mucocutaneous disease having oral ulcerations including lichen planus, pemphigus vulgaris and bullous pemphigoid comprising administering azathioprine (an immunosuppressive agent), and a steroidal antiinflammatory agent see page 257 first full paragraph, see also MATERIALS AND METHODS. Lozada teaches that Azathioprine is administered from 5 mg every other day to 100 mg/day, see pages 258 Drugs and Results. See also page 259, Col. 2, first full paragraph as well as page 258 Adverse effects.

Sharpe et al. (USPN 5,637,616) teaches a method for topical treatment of mucosal lesions and in particular bullous pemphigoid, lichen planus, and aphthous ulcers employing gel, ointment, cream, foam, lotion or a solution that is orally applied, swished and expectorated or swallowed, see in particular claims 5-13. Sharpe et al. (USPN 5,637,616) also teaches that topical corticosteroids are known to be employed in treating aphthous ulcers, see col. 4, lines 41-47. Sharpe et al. (USPN 5,637,616) also teaches that bullous pemphigoid is known to be treated with immunosuppressive agents

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in addition to steroids and pemphigus is known to be treated with corticosteroids, such as prednisone and prednisolone as well as immunosuppressive agents such as azathioprine, cyclophamide, methotrexate and cyclosporine, see col. 3, lines 23-30; see also col. 2, 62-col. 3, line 4. Sharpe et al. also teaches the employment of anti-inflammatory agents in its composition, see in particular col. 10 lines 51-56. Finally, Sharpe et al. teaches that these oral lesions are accompanied by pain, see col 1, lines 39-43, see also col. 5, lines 32-36.

Hewitt, Lozada and Sharpe et al. (USPN 5,637,616) taken together, do not particularly teach the incorporation of NSAIDS in their methods. The primary references do not expressly teach the active agents being swished in the mouth.

Batt et al. teaches a method of treating graft versus host disease employing immunosuppressants such as azathioprine and steroids with combination of NSAID such as aspirin, ibuprofen and naproxen (See col. 7, lines 4-44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a liquid formulation comprising azathioprine (an immunosuppressive agent), corticosteroids, and NSAID in the herein claimed method of treating autoimmune diseases of the mouth. It would have also been obvious to employ NSAIDS in their method.

One of ordinary skill in the art would have been motivated to employ a liquid formulation comprising azathioprine (an immunosuppressive agent), corticosteroids, and NSAID in the herein claimed method of treating autoimmune diseases of the mouth because these agents individually are known to be useful in treating autoimmune

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diseases of the mouth. Combining two or more agents which are known to be useful to in treating autoimmune disease of the mouth individually into a single composition useful for the very same purpose is prima facie obvious (See *In re Kerkhoven* 205 USPQ 1069). Furthermore, the oral lesions symptomatic of autoimmune diseases of the mouth are known to be painful. The skilled artisan would have been motivated to add NSAIDS to formulations known to be useful in treating autoimmune diseases of the mouth because pain is known to be associated with these oral lesions. Optimization of amounts is within the purview of the skilled artisan and is therefore obvious. In addition, swishing the active in the mouth would be considered an alternative method to deliver the active in contact with the oral lesion. One of ordinary skilled in the art is in possession of conventional method of delivering active to the disease site. Therefore, absent evidence to the contrary, swishing the active in order for the active agents got in contact with the disease site would be considered an obvious alternative to one of ordinary skill in the art.

### ***Response to Arguments***

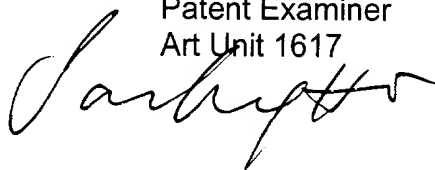
Applicant's arguments with respect to claims 1-3, 5-6, 9-11, 19-21, 23-24, 27-29 and 39 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to San-ming Hui whose telephone number is (571) 272-0626. The examiner can normally be reached on Mon 9:00 to 1:00, Tu - Fri from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, PhD., can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

San-ming Hui  
Patent Examiner  
Art Unit 1617

A handwritten signature in black ink, appearing to read 'San-ming Hui', is written over the printed name and title.